

## CHM129

### Acid-Base Equilibrium: Salts

Determine whether aqueous solutions of the following salts will be acidic, basic or neutral:

- |     |   |   |
|-----|---|---|
| (a) | $\text{Ca}(\text{C}_2\text{H}_3\text{O}_2)_2$ | Basic   |
| (b) | $\text{NH}_4\text{NO}_3$                      | Acidic  |
| (c) | $\text{KCl}$                                  | Neutral   |
| (d) | $\text{Fe}(\text{ClO}_4)_3$                   | Acidic  |
| (e) | $\text{NaClO}$                                | Basic   |
| (f) | $\text{Ba}(\text{NO}_3)_2$                    | Neutral   |
| (g) | $\text{NH}_4\text{NO}_2$                      | $K_a(\text{NH}_4^+) = 5.6 \times 10^{-10}$ , $K_b(\text{NO}_2^-) = 2.2 \times 10^{-11}$<br>$K_a > K_b \rightarrow$ Acidic |
| (h) | $\text{CH}_3\text{NH}_3\text{Cl}$             | Acidic  |
| (i) | $\text{NaF}$                                  | Basic   |